UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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STEVEN I. WEISBURD, ESQ.
DICKSTEIN, SHAPIRO, MORIN & OSHINSKY LLP
1177 AVENUE OF THE AMERICAS
41st FL
NEW YORK, NY 10036-2714

EXAMINER
WILSON, ROBERT W

ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/027,006	KOBAYASHI, MASAYOSHI
	Examiner	Art Unit
	Robert W. Wilson	2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>26 December 2001</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-53</u> is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-53</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All   b)☐ Some *   c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>09/1?/04</u>.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

2.   Claims 1, 14, 26, 32, 38-41, & 48-49 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Ferreria (U.S. Patent No.; 6,857,009B1) in view of Allan (U.S. Patent No.;

6,788,696)

Referring to claim 1, Ferreria teaches: a communication system using TCP/IP which is a packet

switching in order to conduct communication between a server and a client through a

configuration manager or switching apparatus per col. 15 line 37-col. 16 line 15. The

configuration manager or switching apparatus manipulates the packet header or rewrites the

packet header for data transfers between the client and the server per col. 15 line 37-col. 16 line

15. The configuration manager receives a request from the client and splices the connections

end to end or conducts one way splicing in the direction of the client to the server.

Retransmission and flow control are inherently performed by TCP and therefore performed by

the system per col. 15 line 37-col. 16 line 15. It would have been obvious for one of ordinary

skill in the art at the time of the invention to implement splicing the connections end to end for

conducting a one way splicing in the direction of the server to client in order to send data in the

opposite direction from the server to the client. Ferreria does not expressly call for: ACK end of

transmission. The applicant's admitted prior art teaches that the client sends a close request or

ack to instruct the server to cut off the connection per Pg 2 lines 17-20. It would have been

obvious to one of ordinary skill in the art at the time of the invention to add the close connect or

ack of the admitted prior art to the one way splicing of Ferreria because closing the connection is

well known in the art.

Referring to claim 14, Ferreria teaches: a configuration manager or switching apparatus for

relaying TCP/IP which is a packet switching in order to conduct communication between a

server and a client per col. 15 line 37-col. 16 line 15. During the relay of packets the

configuration manager or switching apparatus manipulates the packet header or rewrites the

packet header for data transfers between the client and the server per col. 15 line 37-col. 16 line

15. From the time of relay of a data request from the client the configuration manager splices

the connections end to end or conducts one way splicing in the direction of the client to the

server. Retransmission and flow control are inherently performed by TCP and therefore

performed by the system per col. 15 line 37-col. 16 line 15. It would have been obvious for one

of ordinary skill in the art at the time of the invention to implement the splices the connections

end to end or conducts one way splicing in the direction of the server to client in order to send

data in the opposite direction from the server to the client. Ferreria does not expressly call for:

ACK end of transmission. The applicant's admitted prior art teaches that the client sends a close

request or ack to instruct the server to cut off the connection per Pg 2 lines 17-20. It would have

been obvious to one of ordinary skill in the art at the time of the invention to add the close

connect or ack of the admitted prior art to the one way splicing of Ferreria because closing the

connection is well known in the art.

Referring to claim 26, Ferreria teaches: a communication system using TCP/IP which is a packet switching in order to conduct communication between a server and a client through a configuration manager or switching apparatus which is a packet switching method per col. 15 line 37-col. 16 line 15. The configuration manager or switching apparatus manipulates the packet header or rewrites the packet header for data transfers between the client and the server per col. 15 line 37-col. 16 line 15. The configuration manager receives a request from the client and splices the connections end to end or conducts one way splicing in the direction of the client to the server. Retransmission and flow control are inherently performed by TCP and therefore performed by the system per col. 15 line 37-col. 16 line 15. It would have been obvious for one of ordinary skill in the art at the time of the invention to implement the splices the connections end to end or conducts one way splicing in the direction of the server to client in order to send data in the opposite direction from the server to the client. Ferreria does not expressly call for: ACK end of transmission. The applicant's admitted prior art teaches that the client sends a close request or ack to instruct the server to cut off the connection per Pg 2 lines 17-20. It would have been obvious to one of ordinary skill in the art at the time of the invention to add the close connect or ack of the admitted prior art to the one way splicing of Ferreria because closing the connection is well known in the art.

Referring to claim 32, it is within the level of one skilled in the art to implement all of the limitations of the method of claim 26 in a computer program or software .

Referring to claim 38, Ferreria teaches: a server using TCP/IP which is a packet switching in order to conduct communication between a server and a client through a configuration manager or switching apparatus per col. 15 line 37-col. 16 line 15. The configuration manager receives a

request from the client and splices the connections end to end or conducts one way splicing in

the direction of the client to the server.   It would have been obvious for one of ordinary skill in

the art at the time of the invention to implement the splicing the connections end to end or

conducts one way splicing in the direction of the server to client in order to send data in the

opposite direction from the server to the client. Ferreria does not expressly call for: ACK end of

transmission. The applicant's admitted prior art teaches that the client sends a close request or

ack to instruct the server to cut off the connection per Pg 2 lines 17-20. It would have been

obvious to one of ordinary skill in the art at the time of the invention to add the close connect or

ack of the admitted prior art to the one way splicing of Ferreria because closing the connection is

well known in the art.   It is within the level of one skilled in the art at the time of the invention

to implement the above limitations in software program on the server in order to control the

computer in the server.

Referring to claim 39, Ferreria teaches: a client in a communication system using TCP/IP which

is a packet switching in order to conduct communication between a server and a client through a

configuration manager or switching apparatus per col. 15 line 37-col. 16 line 15. The

configuration manager receives a request from the client and splices the connections end to end

or conducts one way splicing in the direction of the client to the server.   It would have been

obvious for one of ordinary skill in the art at the time of the invention to implement the splicing

the connections end to end or conducts one way splicing in the direction of the server to client in

order to send data in the opposite direction from the server to the client. Ferreria does not

expressly call for: ACK end of transmission. The applicant's admitted prior art teaches that the

client sends a close request or ack to instruct the server to cut off the connection per Pg 2 lines 17-20. It would have been obvious to one of ordinary skill in the art at the time of the invention to add the close connect or ack of the admitted prior art to the one way splicing of Ferreria because closing the connection is well known in the art. It is within the level of one skilled in the art at the time of the invention to implement the above limitations in software program on the computer in the server in order to control the server.

Referring to claim 40, Ferreria teaches: a server using TCP/IP which is a packet switching in a communication system in order to conduct communication between a server and a client through a configuration manager or switching apparatus per col. 15 line 37-col. 16 line 15. The configuration manager receives a request from the client and splices the connections end to end or conducts one way splicing in the direction of the client to the server. It would have been obvious for one of ordinary skill in the art at the time of the invention to implement the splicing the connections end to end or conducts one way splicing in the direction of the server to client in order to send data in the opposite direction from the server to the client. Ferreria does not expressly call for: ACK end of transmission. The applicant's admitted prior art teaches that the client sends a close request or ack to instruct the server to cut off the connection per Pg 2 lines 17-20. It would have been obvious to one of ordinary skill in the art at the time of the invention to add the close connect or ack of the admitted prior art to the one way splicing of Ferreria because closing the connection is well known in the art.

In Addition Ferreria teaches:

Regarding claim 41, packet information is manipulated or rewritten per col 15 line 37-col. 16 line 15.

Referring to claim 48, Ferreria teaches: a client in a communication system using TCP/IP which is a packet switching in order to conduct communication between a server and a client through a configuration manager or switching apparatus per col. 15 line 37-col. 16 line 15. The configuration manager receives a request from the client and splices the connections end to end or conducts one way splicing in the direction of the client to the server. It would have been obvious for one of ordinary skill in the art at the time of the invention to implement the splicing the connections end to end or conducts one way splicing in the direction of the server to client in order to send data in the opposite direction from the server to the client. Ferreria does not expressly call for: ACK end of transmission. The applicant's admitted prior art teaches that the client sends a close request or ack to instruct the server to cut off the connection per Pg 2 lines 17-20. It would have been obvious to one of ordinary skill in the art at the time of the invention to add the close connect or ack of the admitted prior art to the one way splicing of Ferreria because closing the connection is well known in the art. It is within the level of one skilled in the art at the time of the invention to implement the above limitations in software program on the computer in the server in order to control the server.

In Addition Ferreria teaches:

Regarding claim 49, packet information is manipulated or rewritten per col 15 line 37-col. 16 line 15.

3.   Claims 2, 15, 42, & 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Ferreria (U.S. Patent No.; 6,857,009B1) in view of Allan (U.S. Patent No.; 6,788,696) further in

view of admitted prior art.

Referring to claim 2, the combination of Ferreria and Allan teach: the communication system as

set forth in claim 1 and a configuration manager or switching apparatus which inherently has

means for relaying and rewriting and means for conducting one way splicing. The combination

does not expressly call for: client side processing unit and server side processing unit. The

admitted prior art in the specification teaches a client side processing unit and server side

processing unit per Fig 19 of the specification. It would have been obvious to one of ordinary

skill in the art at the time of the invention to add the architecture of the admitted prior art in the

specification to the communication system of the combination of Ferreria and Allan because it is

well known in the art.

Referring to claim 15, the combination of Ferreria and Allan teach: the switching apparatus as set

forth in claim 14 and a configuration manager or switching apparatus which inherently has

means for relaying and rewriting and means for conducting one way splicing. The combination

does not expressly call for: client side processing unit and server side processing unit. The

admitted prior art in the specification teaches a client side processing unit and server side

processing unit per Fig 19 of the specification. It would have been obvious to one of ordinary

skill in the art at the time of the invention to add the architecture of the admitted prior art in the

specification to the communication system of the combination of Ferreria and Allan because it is

well known in the art.

Referring to claim 42, the combination of Ferreria and Allan teach: the server as set forth in

claim 41.The combination of Ferreria and Allan do not expressly call for: header including

sequence number, data length, and ACK number. The admitted prior art of the specification

teaches: header including sequence number, data length, and ACK number per Pg 2 lines 21-Pg

3 line 6. It would have been obvious to add the sequence number, data length, and ACK number

of the admitted prior art of the specification to the server of the combination of Ferreria and

Allan because it is well known in the art.

Referring to claim 50, the combination of Ferreria and Allan teach: the client as set forth in claim

49. The combination of Ferreria and Allan do not expressly call for: header including sequence

number, data length, and ACK number. The admitted prior art of the specification teaches:

header including sequence number, data length, and ACK number per Pg 2 lines 21-Pg 3 line 6.

It would have been obvious to add the sequence number, data length, and ACK number of the

admitted prior art of the specification to the client of the combination of Ferreria and Allan

because it is well known in the art.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
patent by another filed in the United States before the invention by the applicant for patent, except that an
international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
subsection of an application filed in the United States only if the international application designated the United
States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 1 & 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Ferreria (U.S.

Patent No.; 6,857,009B1).

Referring to claims 1 & 14, Ferreria teaches: a communication system using TCP/IP which is a

packet switching in order to conduct communication between a server and a client through a

configuration manager or switching apparatus per col. 15 line 37-col. 16 line 15. Subsequently

the applicant has defined a switching apparatus "wherein". According to MPEP Para 2111.04

"wherein" implies optional limitations. Consequently the examiner has interpreted all of the

steps after "wherein" as optional limitations.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6.   Claims 1-53 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with

the written description requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to reasonably convey to one skilled in the relevant

art that the inventor(s), at the time the application was filed, had possession of the claimed

invention.

Referring to claims 1, 14, 26, & 32 the applicant's specification teaches that successive flow

control and retransmission control are performed by the client and the server endpoints and that

the switching apparatus fools the endpoints by setting up a one-way splicing control. Where in

the specification does it teach that the "switching apparatus" performs "as well as successively

conducting retransmission control and flow control of communication in the direction from said

client to said server".

Referring to claims 38 & 40, the applicants specification describes how TCP flow control is

performed in the server and client. The specification describes how the switching apparatus

fools the client and server's TCP software by setting upon one-way splicing. Where in the

specification does if define how the one way splicing is performed in the server?

Referring to claim 39 & 48, the applicants specification describes how TCP flow control is performed in the server and client. The specification describes how the switching apparatus fools the client and server's TCP software by setting upon one-way splicing. Where in the specification does if define how the one way splicing is performed in the client

Claim Rejections - 35 USC § 112

7.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8.   Claims 1-53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to claim 1-2, 7, 10, 14, 20, what is meant by "packet in question", "server in question", and "client in question"? Is a "packet in question" the same as a "packet"? Is the "server in question" the same as the "server"? Is the "client in question" the same as the "client"?

Referring to claims 4-5, what is meant by "communication partner"?

Referring to claim 6, what is meant by means for notifying header information? How is a header notified?

Referring to claim 9, what is meant by a "divisional packets"?. Is applicant trying to say that packets are fragmented into new packets or dividing a packet into smaller packets.

Referring to claim 12, what is meant by "group in question"? Is a group in question the same as a group? Also what is meant by "corresponding server"? Is a "corresponding server" the same as a "server" ?

Referring to claim 13 & 25, what is meant by "said classified group basis"?

Referring to claims 17-18, what is meant by "communication partner"? Does the

"communication partner" differ from the client or server?

Referring to claim 19, what is meant by means for notifying header information? How does one

notify a header?

Referring to claim 20 & 23, what is meant by "client in question"?

Referring to claim 22 & 24, what is meant by divisional packet?

Referring to claim 25, what is meant by "group in question"?

Referring to claim 26, what is meant by "server in question" and "client in question"? What is

meant by " plurality of servers" and "said server"? Which one of the plurality of servers is said

server"? What is meant by "clients" and "said client"? Which one of the plurality of clients in

the "said client"? What is meant by "packet in question"? Is "packet in question" the same as

the packet or "said packet"?

Referring to claim 27, what is meant by "communication partner"? Does the "communication

partner" differ from the client or server?

Referring to claim 28, what is meant by "individual said server"?

Referring to claim 30, what is meant by "client in question" and is "server" the same of new

server? What is meant by " plurality of servers" and "said server"? Which one of the plurality of

servers is said server"? What is meant by "clients" and "said client"? Which one of the plurality

of clients in the "said client"? What is meant by "packet in question"? Is "packet in question"

the same as the packet or "said packet"? What is meant by "client in question"? Is the client in

question the same as the client?

Referring to claim 31, what is meant by "groups" and "classified group basis"? Are they the

same or different" What is meant by "client in question"? What is meant by "server" ? Is server

the same as said server?

Referring to claim 32-33, 38 what is meant by "the control of the computer"? Is the switching

program running on the computer and performing the controlling? What is meant by "packet in

question" which is referred to twice? Are they the same "packet in question" or different "packet

in question"? What is meant by "below a transport layer of packet in question"?

Referring to claim 35, what is meant by "divisional packets" & " classified group basis"?

Referring to claim 37, what is meant by "client in question"& " classified group basis"?

Referring to claim 39, what is meant my "server in question"? Is the "server in question" the

same as the "server"?

Referring to claim 41-42, what is meant by "packet in question"?

Referring to claim 43, what is meant by "communication partner"?

Referring to claim 45, what is meant by "divisional packets" and "division"?

Referring to claim 47, what is meant by "classified group basis"? Are "classified group basis"

the same as "groups"?

Referring to claim 48, what is meant by "client conducting communication between a server and

a client"? The switching apparatus conducts the communication between the client and the server

not the client. The client does not conduction communication with itself. What is meant by

"server in question"?

Referring to claim 51, what is meant by "communication partner"?

Referring to claim 52, what is meant by "individual said server"?

Referring to claim 53, what is meant by "divisional packets"?

Referring to claim 54, what is meant by "client in question "?

Referring to claims 55, what is meant by "classified group basis" are they the same as "groups"?

What is meant by "groups in question"?

Claim Objections

9.   Claims 2-9, 11-13, & 16-25 are objected to because of the following informalities:

Claims 2- 9, 11-13, & 16- 25, are objected to because the utilization of the wording "wherein"

before limitations which the examiner believes that the applicant intends as optional limitations.

The examiner recommends removing wherein and replacing"wherein" with "comprising".
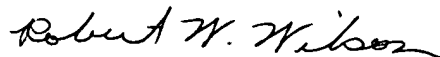
Appropriate correction is required.

Conclusion

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Robert W. Wilson whose telephone number is 571/272-3075.
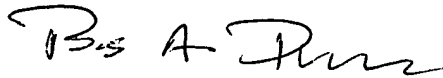
The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chau T. Nguyen can be reached on 571/272-3126. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert W Wilson
Examiner
Art Unit 2661

BOB PHUNKULH
PRIMARY EXAMINER

RWW
11/23/05